



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0494; Directorate Identifier 2014-NM-160-AD; Amendment 39-18275; AD 2015-19-13]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model DHC-8-400 series airplanes. This AD was prompted by reports of inadvertent deployment of a single outboard spoiler during flight. This AD requires replacement of the power control units (PCUs) for the outboard spoilers with upgraded PCUs. We are issuing this AD to prevent leakage of the piston head seal and piston rod seals of the outboard spoiler PCUs, which could result in inadvertent spoiler deployment and reduced controllability of the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a

certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER.]

ADDRESSES: You may examine the AD docket on the Internet at

<http://www.regulations.gov/#!docketDetail;D=FAA-2015-0494>; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Bombardier, Inc.

Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0494.

FOR FURTHER INFORMATION CONTACT: Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7318; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc. Model DHC-8-400 series airplanes. The NPRM published in the Federal Register on March 24, 2015 (80 FR 15521).

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2014-22, dated July 16, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model DHC-8-400 series airplanes. The MCAI states:

Although [Canadian] AD CF-2009-26 [dated May 21, 2009 (<http://wwwapps3.tc.gc.ca/Saf-Sec-Sur/2/CAWIS-SWIMN/attachment.asp?aiid=CF-2009-26&revid=0&cntr=CF&file=CFCF-2009-26.pdf&type=PDE>), which corresponds to FAA AD 2009-25-05, Amendment 39-16124 (74 FR 63574, December 4, 2009)] was issued to mandate the upgrade of the spoiler lift/dump valve, it did not reduce the rate of inadvertent single spoiler deployment occurrences. Further investigation revealed that the outboard spoiler PCUs may also be subject to pressure reversals at the PCU main control valve seal, resulting in leakage at the piston head seal and piston rod seals. If not corrected, this condition may result in [inadvertent spoiler deployment and] reduced controllability of the aeroplane.

This [Canadian] AD mandates the replacement of the existing outboard spoiler PCUs with the upgraded PCUs with re-designed seals for better leakage protection.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2015-0494-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM (80 FR 15521, March 24, 2015) and the FAA's response to that comment.

Request to Revise Applicability

Horizon Air requested that the applicability of the NPRM (80 FR 15521, March 24, 2015) be revised to specify that the NPRM would only be applicable to airplanes with outboard spoiler PCU part number (P/N) 390700-1007 installed. The commenter noted that the illustrated parts catalog for the Bombardier, Inc. Model DHC-8-400 series airplanes indicates that outboard spoiler PCU P/N 390700-1009 is a direct replacement for P/N 390700-1007, and that these two part numbers are one way interchangeable. The commenter stated that operators who replaced outboard spoiler PCU P/N 390700-1007 with P/N 390700-1009 prior to the effective date of the NPRM might not have recorded the incorporation of Bombardier Service Bulletin 84-27-63, dated October 17, 2013, into their maintenance records and it would be an unnecessary regulatory burden for those operators to go back and record this service information. The Accomplishment Instructions of Bombardier Service Bulletin 84-27-63, dated October 17, 2013, state that the PCU should be replaced using the guidance in the Bombardier, Inc. Model DHC-8-400 Aircraft Maintenance Manual; therefore the actions that would be mandated by the NPRM would have been accomplished.

We agree with the commenter's request based on the information provided by the commenter. We have revised paragraph (c), "Applicability," of this final rule to specify

that only airplanes having certain serial numbers and an outboard spoiler PCU having P/N 390700-1007 installed are affected by the requirements of this final rule.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD with the change described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 15521, March 24, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 15521, March 24, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

Bombardier, Inc. has issued Service Bulletin 84-27-63, dated October 17, 2013. The service information describes procedures for replacement of the existing outboard spoiler PCUs with upgraded PCUs. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Costs of Compliance

We estimate that this AD affects 82 airplanes of U.S. registry.

We also estimate that it will take about 4 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required

parts will cost about \$0 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$27,880, or \$340 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2015-0494>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-19-13 Bombardier, Inc.: Amendment 39-18275. Docket No. FAA-2015-0494; Directorate Identifier 2014-NM-160-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001 and 4003 through 4453 inclusive with an outboard spoiler power control unit (PCU) having part number 390700-1007 installed in the outboard position.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by reports of inadvertent deployment of a single outboard spoiler during flight. We are issuing this AD to prevent leakage of the piston head seal

and piston rod seals of the outboard spoiler PCUs, which could result in inadvertent spoiler deployment and reduced controllability of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Replacement of PCUs for the Outboard Spoilers

Within 6,000 flight hours or 36 months after the effective date of this AD, whichever occurs first: Replace the outboard spoiler PCUs with upgraded PCUs having re-designed seals, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-63, dated October 17, 2013.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2014-22, dated July 16, 2014, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2015-0494-0002>.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 84-27-63, dated October 17, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., Q Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 16, 2015.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-24252 Filed: 9/28/2015 08:45 am; Publication Date: 9/29/2015]